DOCUMENT RESUME

ED 021 528 JC 680 267

By- Martin, Peter B.

FRESHMEN READING ABILITY: FALL 1967-DAY SESSION, NELSON-DENNY READING TEST.

City Univ. of New York, N.Y. New York City Community College.
Pub Date Nov 67
Note- 10p.
EDRS Price MF-$0.25 HC-$0.48
Descriptors- CURRICULUM DEVELOPMENT, EDUCATIONAL DISADVANTAGEMENT, EVALUATION TECHNIQUES, *JUNIOR COLLEGES, READING ABILITY, READING ACHIEVEMENT, READING CENTERS, READING CLINICS, READING COMPREHENSION, *READING DIAGNOSIS, READING IMPROVEMENT, *READING LEVEL, READING MATERIAL SELECTION, READING SKILLS, READING TESTS, REMEDIAL READING, *REMEDIAL READING CLINICS, TESTING
Identifiers- Nelson Denny Reading Test, *New York City

Results of the Nelson-Denny Reading Test are used as a screening device for selecting students for remedial work in the Reading and Study Skills Center (R-S) at New York Community College (NYCC). A descriptive analysis of the fall 1967 day session freshmen showed that the average freshman at NYCC was reading at the 12.6 grade level, or .4 grade levels below the national norm for college freshmen. Half of the freshmen were a the forty-second percentile and below with the range varying between the first and 99th percentile. Twenty 7 of the freshmen scored at or below the 10.5 grade level, the cut-off point used by the R-S. The reading ability of the freshmen of 1967 was essentially the same as that of all preceding freshman class. The survey has implications for such areas as curriculum design, remedial programs, textbook selection, and counseling at NYCC. Charts indicating reading ability by departments and local institutional norms are included in the report. (DG)

NEW YORK CITY COMMUNITY COLLEGE
of the CITY UNIVERSITY OF NEW YORK

Office of Student Evaluation
and Development

Student Personnel Services

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

FRESHMEN READING ABILITY

Fall 1967 - Day Session

Nelson-Denny Reading Test

JC 680 267
ED021528

UNIVERSITY OF CALIF.
LOS ANGELES

JUN 12 1968

CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION

Peter B. Martin
November, 1967

INTRODUCTION

For the past few years the Department of Student Personnel Services has been administering the Nelson-Denny Reading Test to all incoming Day Session freshmen at New York City Community College.

The results of the Nelson-Denny Test are used as a screening device for selecting students for remedial work in the Reading and Study Skills Center. Students who score at or below the 10.5 grade (i.e., those who are reading at a level two and one-half years below the required grade level of 13.0) are required to take the non-credit SPS 010 before taking English Composition (CAS 101). Through their work at the Center, such students are expected to raise their reading ability to an appropriate level before they are permitted to take CAS 101. Students in a Career curriculum are expected to read at least at the 11.0 grade level by the end of a semester in the Reading Center and students in a Transfer curriculum are expected to attain at least the 11.3 grade level.

Because of the increasing emphasis placed on remedial and developmental work at New York City Community College, it is felt that a descriptive analysis of the Fall 1967 Day Session freshmen would be of interest to both the administrative and instructional faculty at the College.

Professor Helge Nelson, Director of the Reading and Study Skills Center, has been extremely cooperative in providing the necessary data. This was no small task because of the recent move to Namm Hall and the concommitant need to utilize the test results in the advising and programming of students. Because of this it was not possible to obtain a complete break-down of scores by Department. Sampling techniques, however, were used in arriving at estimated mean scores for each Department. Part II of this report indicates the results of this sampling.

Thanks go to Muriel Fleit and Mary Ruiz for their assistance on preparing the statistical information. We hope that this report will be of some help in the never-ending task of attempting to best serve the needs of the students who come to us.

I-A: FRESHMEN READING ABILITY: DAY SESSION FALL 1967

Prior to the Fall 1967 registration freshmen students were administered the Nelson-Denny Reading Test (form A). The results of the testing indicate that, as far as reading ability is concerned, the Fall 1967 class is almost identical to the Fall 1966 class.

The average freshmen is reading at the 12.6 grade level, which is 0.4 grade levels below the national norm of 13.0. Based on these same national norms, half of our freshmen are reading at the 42nd percentile and below. However, the range of scores varied considerably: from a raw score low of three to a high of one hundred and forty; from the 1st percentile to the 99th percentile.

Significantly, almost twenty percent of our freshmen scored at or below the 10.5 grade level. This has held fairly consistently over the past three years, as is indicated in Table 1. The 10.5 grade level is the cut-off point used by the Reading and Study Skills Center to select students for remedial help in the Center.

Table 1

Freshmen Fall	% at or below 10.5 grade level
1965	20.4
1966	19.4
1967	19.7

Comparison with Fall 1966 Freshmen

Table 2 illustrates the comparison between the Fall 1967 and Fall 1966 freshmen classes. The difference between the mean scores is not significant at the .05 level of significance, which means that the observed differences can be attributed to chance sampling variations and not to any real difference between the two groups. This indicates that this year we are dealing with students whose reading ability is essentially the same as last year's freshmen.

Table 2

Freshmen Reading Ability

Fall 1966	Raw Score	Fall 1967
1346	Number	1617
71.6	Mean **	70.2 *
70.2	Median	70.3
11-154	Range	3-144
21.0	Standard Deviation	21.4

* the population mean is within ± 0.1 of the sample mean at the .95 level of confidence.

** there is no significant difference between the 1966 and 1967 mean scores, at the .05 level of significance.

Comparison with National Norms

The Fall 1967 freshmen read at a level somewhat below the national average for college freshmen.

Table 3

Fall 1967		National Norms Equivalents	
	Raw Score	%ile Rank	Grade Level
Mean	70.2	42	12.6
Median	70.3	42	12.6
Upper Quartile	85.0	63	13.8
Lower Quartile	56.0	23	11.0

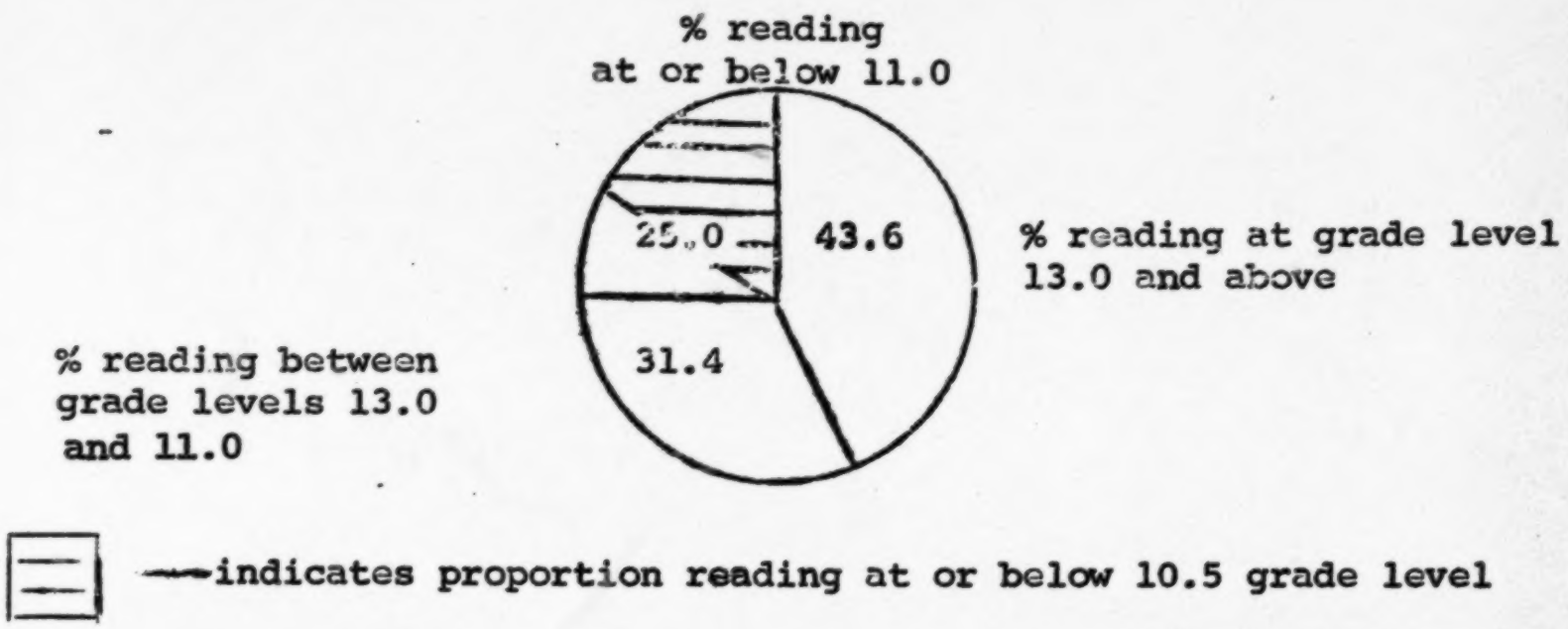
The difference between the New York City Community College mean and the national mean is statistically significant at the .05 level of significance, implying that the difference is due to a real difference in ability and not to chance sampling variation. But a difference of only -0.4 grade levels does not appear to be of practical significance. More important, perhaps, is the following information:

43.6%	of the freshmen are reading at grade level 13.0 and above.
25.0%	of the freshmen are reading at grade level 11.0 and below (i.e., two years below the desired level).
19.7%	of the freshmen are reading at grade level 10.5 and below (students who read below grade level 10.5 are required to take the remedial SPS 010 in the Reading & Study Skill Center).

Implications

To bring the above percentages into better focus, it may be well to transpose these figures into actual numbers of students. The reading test results indicate that in Fall 1967 out of a total of 1963 registered Day Session first semester students, there are at least 490 who are reading at a level two years below the expected and desired level of 13.0. Figure 1 indicates the distribution of reading scores.

Figure 1



Such results have ramifications for faculty concerned with curriculum design, remedial programs, text book selection, counseling, etc. Reading, as we all know, is at the very heart of the current educational process. Perhaps it might be well both for faculty directly concerned with the improvement of reading ability and faculty who are concerned in general with the reading ability of our students to review current research on programs dealing with this problem. Information on such research is available in the monthly, Research in Education (United States Office of Education) and in ERIC/CRIER, a publication of the Educational Resources Information Center/Clearinghouse on the Retrieval of Information and Evaluation on Reading (Indiana University).

Section I-B: LOCAL NORMS: NEW YORK CITY COMMUNITY COLLEGE

This section is primarily for those faculty involved in discussing the Nelson-Denny Reading Test results with students.

Nelson-Denny Reading Test (Form A) Day Session Freshmen: F '67

Table 4

Percentile Rank	Total Raw Score	Grade Level Equivalent
99	124	14.0 + **
95	106	14.0 + **
90	98	14.0 + **
85	93	14.0 + **
80	89	14.0 + **
75	85	13.8
70	81	13.5
65	79	13.3
60	76	13.1
55	73	12.9
50	70	12.6
45	67	12.4
40	65	12.2
35	62	11.9
30	59	11.4
25	56	11.0
20	52	10.4
15	48	9.9
10	43	9.3
5	36	8.5 *
1	26	7.4 *

Use of Local Norms

Table 4 indicates how the score of a particular student compares to the scores of other Day Session freshmen at New York City Community College. The percentile rank on the left indicates the percent of New York City Community students who scored below the corresponding raw score. The grade level equivalent on the right indicates the corresponding grade level, based on national norms.

For example, if a student obtains a total raw score of 76, this means that he scored better than 60 percent of other freshmen at New York City Community College. This same raw score indicates that he is reading at approximately grade level 13.1. Raw scores between those indicated (e.g., a raw score of 74) must be interpolated to discover the appropriate percentile rank and grade level. The Nelson-Denny Reading Test Manual has a more precise grade level table than that indicated in Table 4. However, it is best to consider any raw score as an approximation of a student's true score. Too great a dependence on the absoluteness of a score only distorts the interpretation process. It tends to give more precision to the test results than the test itself is able to provide.

* Extrapolated (from the Nelson-Denny Reading Test Manual, P.20).

** Since the grade equivalents are generally considered less reliable at the higher grade levels, Table 4 does not go beyond the 14.0 grade level (from the Nelson-Denny Reading Test Manual, P.20).

II. READING ABILITY BY DEPARTMENT

The following table indicates the mean, or average, reading ability of the Fall 1967 Day Session freshmen by their Department. As mentioned in the Introduction, random samples were drawn from each curriculum in order to estimate the mean scores for each Department. We are ninty-five percent confident that the true mean for each Department lies within the interval indicated for that Department. From an examination of Table 5 the reader can determine whether or not the interval includes the College mean score of 70.2. Departments which are significantly different from the College mean at the .05 level of significance are noted by an asterisk (*):

*+ indicates that the students in that Department are reading significantly higher than the College average;

*- indicates that the students in that Department are reading significantly lower than the College average.

The grade level equivalent of the interval scores can be determined by referring to Table 4. The Estimated Grade Level in Table 5 is determined from the estimated Department mean and is based on national norms.

The reader is reminded that Table 5 is presented for educational analysis, so that the reader may come to know our students better and be aided in developing effective educational programs in light of this knowledge. Inferences about the quality of the students within each Department must be made with extreme care: a one-dimensional picture (e.g., reading ability) is just that. It must be supplemented by further information.

Table 5: Reading Ability by Department

Department	Number Enrolled	Sample Size	.95 Confidence Interval	Estimated Grade Level
Accounting	128	27	64.3-79.9	12.8
Com. Art	91	22	68.5-85.7	13.2
Construction	101	21	51.3-69.0	11.6 *-
Chemical T.	57	16	69.4-89.8	13.4
Design-Drafting	75	26	57.6-74.9	12.3
Dental Hygiene	61	22	72.6-89.9	13.5 *+
Dental Lab.	63	24	53.9-70.4	11.9 *-
Data Proc.	33	19	72.7-91.3	13.6 *+
Electro-Mech.	52	20	59.7-77.9	12.6
Electrical T.	134	24	63.6-80.2	12.8
Fire Science	45	15	72.5-93.7	13.6 *+
Graphic Arts	81	21	58.7-76.4	12.5
Hotel Tech.	73	24	57.0-73.5	12.2
Liberal Arts	201	13	79.3-102.1	14.0 *+
Marketing M.	91	22	69.1-86.4	13.3
Marketing R.	95	17	61.6-81.4	12.8
Medical Lab.	101	25	63.6-79.8	12.8
Mechanical T.	79	23	50.0-66.9	11.4 *-
Nursing	70	16	59.9-80.3	12.6
Oph. Disp.	33	21	62.9-80.5	12.8
Sec. Legal	86	27	64.3-79.9	12.8
Sec. Med.	69	27	75.6-91.1	13.6 *+
X-Ray	29	12	58.7-82.7	12.7